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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,226	06/21/2002	Jon Yusko	060707-1380	4478

7590

11/29/2006

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EXAMINER

ELALLAM, AHMED

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/064,226

Applicant(s)

YUSKO ET AL.

Examiner

AHMED ELALLAM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date 7/10/02 & 11/12/03.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Regarding claims 30-33, the claimed invention is directed to non-statutory subject matter. The claimed subject matter is related to a computer-readable medium, but doesn't specify the media is encoded with computer executables instructions. Merely stating the computer readable medium comprising a set of executables instructions is held non-statutory.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims, 1-5, 7-10, 15, 16, 20, 22-25, and 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by King Hanna, WO 01/15397 A1. Hereinafter referred to as King.
3. Regarding claim 1, with reference to figure 1, king shows distributed network including at least one local area network (33, 30) having a computer 33 (claimed network device) and Internet 68 (claimed wide area network) having central site 14 (claimed access concentrator) , remote site 15 (claimed customer premise access equipment), the remote site comprising:

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Regarding claim 1, with reference to figure 1, king shows distributed network including at least one local area network (33, 30) having a computer 33 (claimed network device) and Internet 68 (claimed wide area network) having central site 14 (claimed access concentrator) , remote site 15 (claimed customer premise access equipment), the remote site comprising:

NIC 25 connected to device 33 (claimed a first interface operatively connected to the network device and being adapted to receive at least one data packet from the network device);

Interface 21 (a second interface operatively connected to the access concentrator and being adapted to provide at least one data packet to the access concentrator for transmission to the wide area network);

Router 23 in combination with WebDrive 20a (claimed auto-connect module), the router being connected to the first interface and second interface, King also discloses that remote Site 15 can initiate a connection to the Internet. When a computer 33 enabled with a client browser (connected directly or on a LAN) requests a URL that is not available locally the router 23 will establish a DUN (Dial Up Networking) connection using PPP protocol, see Page 5, lines 16-23. (Claimed auto-connect module operably connected to the first interface and the second interface and being adapted to automatically establish a physical connection between the second interface and the access concentrator based at least in part on reception of a data packet intended for the wide area network by the customer premise access equipment).

Regarding claims 2, 20 and 25, King inherently discloses a buffer for storing the URL request prior the PPP connection because some time is required for the connection to be established for delivery of the URL request (Claimed packet) (claimed packet buffer adapted to: store the data packet intended for the wide area network until the physical connection is established; and provide the at least one packet to the second interface after the physical connection is established for transmission to the access concentrator over the physical connection as in claim 2, and storing the data packet until the physical connection is established; and transmitting the data packet to the access concentrator over the established physical connection as in claim 20).

Regarding claim 3, King discloses the router establishing a DUN (Dial Up Networking) connection using PPP protocol only when the URL request is not available locally, see page 5, lines 16-23. (Examiner interpreted this feature provided by the remote site as the claimed packet filter adapted to determine an intended destination of a packet received at the first interface based at least in part on a port used to receive the packet; direct the auto-connect module to establish the physical connection when the intended destination is the wide area network; and bypass the auto-connect module when the intended destination is the customer premise access equipment).

Regarding claim 4, as indicated above with regard to claim 3, King discloses receiving a URL request and deciding to whether establish a connection if the request is not local, King's system inherently provide some form of port/URL association because that is required for the distinction between Local request and Internet request). (Claimed

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the port used to receive the packet is representative of a network protocol associated with the packet).

Regarding claims 5 and 7, as discussed with regard to claim 1 above, King discloses that when the URL request is not local, establishing a DUN (Dial Up Networking) connection using PPP protocol at the router, see Page 5, lines 16-23. (Claimed the packet filter is implemented as part of a Point-to-Point Protocol (PPP) layer of a network protocol stack as in claim 5 and auto-connect module is implemented as part of a Point-to-Point Protocol (PPP) layer of a network stack as in claim 7).

Regarding claim 8, with reference to figure 1, king discloses a router in central site 14, the router for processing data transmitted between a computer 33 (Claimed network device) and a central site (claimed access concentrator) of a wide area network, King further discloses that remote Site 15 can initiate a connection to the Internet. Wherein the computer 33 is enabled with a client browser (connected directly or on a LAN) requests a URL that is not available locally the router 23 will establish a DUN (Dial Up Networking) connection using PPP protocol, see Page 5, lines 16-23. (Examiner interpreted the capability of the router of using a PPP connection as the claimed a *network protocol stack comprising: at least one higher-level protocol layer; at least one lower-level protocol layer; and a Point-to-Point Protocol (PPP) layer operably connected to the at least one higher-level protocol layer and the at least one lower-level protocol layer and being adapted to: receive a data packet from the network device via the higher-level protocol layer; determine an intended destination of the packet based at least in part on a port used to receive the packet from the network device; and*

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automatically establish a physical connection with the access concentrator when the wide area network is the intended destination of the packet, the reasons are based on the PPP standard that is located between higher level and lower layer levels that are required by standard to provides the necessary layer processing for data transmission and reception between two peers in the communication network).

Regarding claim 9, Examiner Interpreted the teaching of King of having the URL requests a URL not available locally, then the router 23 establishes a DUN (Dial Up Networking) connection using PPP protocol as being the claimed the PPP layer is further adapted to bypass an automatic establishment of a physical connection to the access concentrator when the intended destination is a protocol layer of the network protocol stack).

Regarding claim 10, King inherently discloses a buffer for storing the URL request prior the PPP connection because some time is required for the connection to be established for delivery of the URL request (Claimed packet) (claimed the PPP layer is further adapted to: store the packet in a buffer until the physical connection is established; and provide the packet from the buffer to the lower-level protocol layer for transmission to the access concentrator when the physical connection is established).

Regarding claim 15, with reference to figure 1, King discloses a method for communicating data from computer 33 (claimed network device) of a local area network 30 to central site 14 (claimed access concentrator) connected to the Internet (claimed a wide area network) using a remote site 15 (claimed customer premise access equipment), the method comprising

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receiving a URL request from computer 33 through NIC 25 connected to computer 33 (inherently the NIC have a port, because that is required to receive the URL request) (claimed receiving, at a port of the customer premise access equipment, a data packet from the network device);

establishing a connection to the Internet when URL requests is not available locally, the connection is established using a router by DUN (Dial Up Networking) connection using PPP protocol, see Page 5, lines 16-23. (King's router capability to differentiate between a local and remote destination based on the received URL packet, and establishing the PPP connection when the URL packet is not local is interpreted as the claimed reads on the claimed determining an intended destination of the data packet based at least in part on the port; and automatically establishing a physical connection between the customer premise access equipment and the access concentrator for transmission of the packet when the intended destination is the wide area network).

Regarding claims 16 and 23, Examiner Interpreted the teaching of King of having the URL requests being not available locally, then the router 23 establishes a DUN (Dial Up Networking) connection using PPP protocol as being the claimed bypass an automatic establishment of a physical connection between the customer premise access equipment and the access concentrator when the intended destination is the customer premise access equipment as in claims 16 and 23.

Regarding claim 22, with reference to figure 1, king discloses a router in central site 14, the router for processing data transmitted between a computer 33 (Claimed

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network device) and a central site (claimed access concentrator) of a wide area network, the URL is received over a NIC 25 (The NIC inherently has a port because that is required for receiving the URL request (Claimed receiving, at the PPP layer, a data packet from the network device via a port of a higher-level protocol layer of the network stack) King further discloses that remote Site 15 can initiate a connection to the Internet. Wherein the computer 33 is enabled with a client browser (connected directly or on a LAN), the computer when requesting a URL that is not available locally, the router 23 will establish a DUN (Dial Up Networking) connection using PPP protocol, see Page 5, lines 16-23. (Examiner interpreted the capability of the router of using a PPP connection and interfacing between the LAN and WAN, the computer requesting the URL as the claimed *network protocol stack of a customer premise access equipment for processing data transmitted between a network device of a local area network and an access concentrator of a wide area network, the network protocol stack including at least a Point-to-Point Protocol (PPP) layer, a method comprising the steps of: receiving, at the PPP layer, a data packet from the network device via a port of a higher-level protocol layer of the network stack; determining, at the PPP layer, an intended destination of the first data packet based at least in part on the port; and automatically establishing a physical connection between the customer premise access equipment and the access concentrator when the intended destination of the data packet is the wide area network,* (the reasons are based on the PPP layer standard that is located between higher level and lower layer levels that are required by standard to provides the necessary layer processing for data transmission and reception between two peers in the

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communication network, and the capability to either local or remote routing of the received data packet inherently provides for the destination determination by the standard).

Regarding claim 24, King discloses routing the request over the Internet after establishing the PPP connection. See page 5, and lines 16-23.

Regarding claims 30-33, claims 30-33 are related to computer readable medium comprising a set of executable instructions adapted to manipulate a processor to provide the method of respective claims 15, 16, 25 and 20. The claimed processor provides the same function as discussed above with regard to respective claims 15, 16, 25 and 20, in addition King discloses the router being a software router, since the router is implemented in software and it provides the same functions as claimed processor. See page 4, and lines 12-20.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6, 11-14, 17-19, 21 and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over King.

Regarding claims 6, 14, 21 and 29, King discloses the "Remote Site" is comprised (inter alias) a DCE (Data Communications Equipment) interface 21 and give some example of the interface being a modem, ISDN, xDSL, ATM, RF, or other communications interface / adapter, see page 4, lines 12-20. (Claimed DSL modem, a dial-up modem, and a cable modem). However King doesn't specify the DCE is an optical network termination. It would have been obvious to a person of skill in the art at the time the invention was made to make the suggested "other communications interface / adapter" being an optical network termination so that the invention of King can be applied to optical networks. The advantage would be the provisioning of fast Internet connection in the available high bandwidth optical network.

Regarding claim 11-13, 17-19, 26-28 Claims 11-13, 17-19, 26-28 specify the details of routing the packet based on the packet destination using a routing table details. King discloses routing packets based on the destination, but doesn't give the details of a routing table. Examiner takes official notice that routing tables details are well known in the art of data routing. Since official notice is taken, it would have been obvious to a person of skill in the art to provide the router of King with routing table(s) with the necessary details such as entries with regard to ports, source and destination IP addresses, etc...because that is necessary for lookup determination of the packet destinations. The advantage would be the implementations of available routing tables (Software/hardware) that are already widely used resulting in the saving of implementation cost of King' system.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: See Form PTO-982.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED ELALLAM whose telephone number is (571) 272-3097. The examiner can normally be reached on 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, To Doris can be reached on (571) 272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AHMED ELALLAM
Examiner
Art Unit 2616
11/27/06



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